L Number	Hits	Search Text	DB	Time stamp
1	1	alikani.in.	USPAT; US-PGPUB; DERWENT	2003/07/16 08:15
2	1	composite adj blastocyst	USPAT; US-PGPUB; DERWENT	2003/07/16 08:16
3	0	non-viable adj pre-embryo	USPAT; US-PGPUB; DERWENT	2003/07/16 08:16
4	58	human adj embryonic adj stem adj cell	USPAT; US-PGPUB; DERWENT	2003/07/16 08:17
5	52	(human adj embryonic adj stem adj cell) and isolat$	USPAT; US-PGPUB; DERWENT	2003/07/16 08:17
6	24	(human adj embryonic adj stem adj cell) same isolat$	USPAT; US-PGPUB; DERWENT	2003/07/16 08:17

FILE 'HOME' ENTERED AT 07:52:11 ON 16 JUL 2003)

FILE 'MEDLINE, BIOSIS, EMBASE, LIFESCI, CAPLUS' ENTERED AT 07:55:30 ON 16 JUL 2003

E ALIKANI M/AU

L1 139 S E3 OR E4
L2 60 DUP REM L1 (79 DUPLICATES REMOVED)
L3 12 S L2 AND BLASTOCYST

FILE 'STNGUIDE' ENTERED AT 07:58:39 ON 16 JUL 2003

FILE 'MEDLINE, BIOSIS, EMBASE, CAPLUS, LIFESCI' ENTERED AT 07:59:09 ON 16 JUL 2003

L4 10 S COMPOSITE (A) BLASTOCYST
L5 6 DUP REM L4 (4 DUPLICATES REMOVED)
L6 560 S PRE-EMBRYO
L7 269 DUP REM L6 (291 DUPLICATES REMOVED)
L8 0 S L6 AND DISSOCIATE
L9 2 S L6 AND AGGREGATE
L10 2 DUP REM L9 (0 DUPLICATES REMOVED)

AN 2002709662 MEDLINE
DN 22359659 PubMed ID: 12470548
TI Human **blastocysts** from aggregated mononucleated cells of two or more non-viable zygote-derived embryos.
CM Comment in: Reprod Biomed Online. 2002 Sep-Oct;5(2):103
AU **Alikani Mina**; Willadsen Steen M
CS Gamete and Embryo Research Laboratory, Institute for Reproductive Medicine and Science of Saint Barnabas, 101 Old Short Hills Road, Suite 501, West Orange, NJ 07052 USA.. mina.alikani@embryos.net
SO Reprod Biomed Online, (2002 Jul-Aug) 5 (1) 56-8.
Journal code: 101122473. ISSN: 1472-6483.
CY England: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200301
ED Entered STN: 20021217
Last Updated on STN: 20030103
Entered Medline: 20030102
AB This study examined the developmental capacity of aggregates of surviving mono-nucleated cells isolated from several non-viable human embryos on day 3 or day 4 after fertilization. The results clearly demonstrate that some blastomeres from non-viable embryos do indeed maintain their developmental potential and regulatory capacity to the extent of being able to contribute to a normally organized **blastocyst**, with as many as 90% diploid cells. Although the chimaeric nature of such **blastocysts** excludes them from use in therapeutic IVF, they are of particular relevance to the discussion of embryonic and trophectodermal stem cell line production.

7 ANSWER 2 OF 269 MEDLINE DUPLICATE 1
AN 2003060836 IN-PROCESS
DN 22458818 PubMed ID: 12571180
TI A morphological and chromosomal study of blastocysts developing from morphologically suboptimal human **pre-embryos** compared with control blastocysts.
AU Hardarson Thorir; Caisander Gunilla; Sjogren Anita; Hanson Charles; Hamberger Lars; Lundin Kersti
CS Department of Obstetrics and Gynaecology, Goteborg University, SU/Sahlgrenska, 413 45 Gothenburg, Sweden.
SO HUMAN REPRODUCTION, (2003 Feb) 18 (2) 399-407.
Journal code: 8701199. ISSN: 0268-1161.
CY England: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS IN-PROCESS; NONINDEXED; Priority Journals
ED Entered STN: 20030207
Last Updated on STN: 20030207
AB BACKGROUND: IVF laboratories performing embryo transfer at day 2 or 3 after fertilization are currently discarding **pre-embryos** considered suboptimal using morphological criteria. The objective of this study was to investigate whether blastocysts, cultured from such **pre-embryos** (surplus), were chromosomally and morphologically normal. As a control group we used morphologically good quality embryos (GQE), cultured to the blastocyst stage. METHODS: Human **pre-embryos** considered suboptimal were cultured to the blastocyst stage. As a control group, frozen-thawed **pre-embryos** of good quality were cultured under identical conditions. The chromosomal status of the blastocysts obtained was studied by multi-colour fluorescence in-situ hybridization for chromosomes 13, 16, 18, 21, 22, X and Y. RESULTS: There is, on average, a significantly higher degree of chromosomal aberrations in blastocysts derived from surplus **pre-embryos** compared to blastocysts derived from GQE, and the chromosomal aberrations are generally found in a higher number of blastomeres per blastocyst. In addition, blastocysts from surplus **pre-embryos** had significantly poorer morphology compared to GQE. Improvement in morphology and/or developmental rate in surplus **pre-embryos** between day 2 and day 3 did not predict a morphologically/chromosomally normal blastocyst. However, this study shows that close to half of the surplus **pre-embryos** that reach the blastocyst stage can be considered chromosomally normal when assessed for these seven chromosomes. Furthermore, we found that chromosomal aberrations were more concentrated in a particular cell population within blastocysts derived from GQE, compared with surplus blastocysts. CONCLUSIONS: The study suggests that even if the IVF laboratory is on average making the correct decision about the potential of a **pre-embryo**, surplus **pre-embryos** that might become chromosomally normal blastocysts are still being discarded.